# Two Species of the Spider Genus *Clubiona* (Araneae: Clubionidae) New to the Japanese Fauna<sup>10</sup>

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小野展嗣<sup>20</sup>: 日本の動物相に加わったフクログモ属 (クモ目: フクログモ科) の 2 種

Abstract Two species of the spider genus *Clubiona* are newly recorded from Japan, that is, *C. trivialis* C. L. Koch, 1843, collected from Mt. Yôteizan, Hokkaido, and *C. mandschurica* Schenkel, 1953, sensu Paik, 1990, collected from Akita and Ishikawa Prefectures. The former species is widely distributed from Europe through Siberia to North America, while the latter is known from China, Korea and Japan.

Two species of clubionid spiders, *Clubiona trivialis* C. L. Koch, 1843, and *C. mandschurica* Schenkel, 1953, newly recorded from Japan will be reported in the present paper.

As the species name indicates, Clubiona trivialis was commonly known to be widely distributed in the Holarctic regions from Europe through Siberia and China to North America, and it was unaccountable that this spider was never found in Japan. Though the author obtained many specimens of Clubiona spiders from Japan in the course of a revisional study of clubionid spiders (Ono, 1986 a, b, 1989, 1991, 1992, etc.), only 20 of C. trivialis collected on Mt. Yôteizan, Hokkaido, were included in the materials. This species seems rare in Japan.

Clubiona mandschurica was described by Schenkel (1953) based on 17 specimen collected in "Kirin (Jilin), Mandschurei," China, 2-VI-1928. It was recorded from Jilin and Shanxi by the Chinese colleagues (Zhu & Yu, 1982; Hu, 1984; Guo, 1985). Zhu and Yu (1982) described the female of the species unknown at that time. On the other hand, Paik (1990) described both the sexes of this species from Korea with many collecting records in the country. Comparing the description and illustrations of Korean "mandschurica" made by Paik with those of the Chinese specimens made by Schenkel as well as by the Chinese authors [with the exception of Guo (1985); possibly based on another species], the present author recognized some morphological differences between Chinese and Korean spiders especially in the embolus of male palp and the size of spermatheca in female genitalia. The structure of male palp of the Japanese specimens (female is unknown in Japan)

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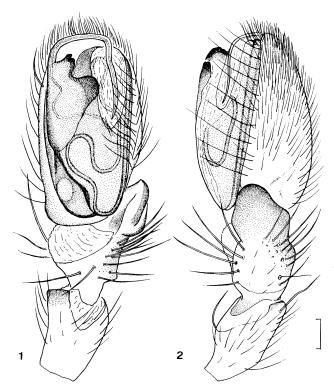
agrees well with the illustrations by PAIK. Though the present author could not examine the type specimen, the Japanese spider was provisorily regarded as *C. manschurica* in the sense of PAIK (1990). As in the case of *Clubiona mayumiae* and *C. pseudogermanica* recently reported by the author (Ono, 1993) a specific (or subspecific) difference may exist between the Chinese and Korean-Japanese spiders of "*C. mandschurica*."

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## Clubiona trivialis C. L. Koch, 1843 (Figs. 1-2)

Clubiona trivialis C. L. Koch, 1843, p. 132 (type area: Germany; type specimens not examined).
——Simon, 1932, p. 926.
——Locket & Millidge, 1951, p. 140.
——Edwards, 1958, p. 390.
——Wiehle, 1965, p. 473.
——Dondale & Redner, 1982, p. 30.
——Hu, Y.-j., 1979, p. 65.
——Hu, J.-l., 1984, p. 297.
——Roberts, 1985, p. 86.
——Mikhailov, 1990, p. 145; 1992, p. 5.
——Chen & Gao, 1990, p. 154.
——Heimer & Nentwig, 1991, p. 406.

Clubiona obtusa Emerton, 1915, p. 153 (synonymized by Edwards, 1958). Microclubiona trivialis: Sterghiu, 1985, p. 45. For other literature see catalogues.



Figs. 1-2. Clubiona trivialis (Hokkaido).—1, Male palp, ventral view; 2, same, retrolateral view. (Scale: 0.1 mm.)

Specimens examined. 23, Mt. Yôteizan, 1,700-1,800 m alt., Hokkaido, Japan, 7-VII-1989, N. YASUDA leg. (NSMT-Ar 3167).

Notes. Measurement based on the Japanese specimens:  $\circlearrowleft$  Body length 4.51–4.59 mm, prosoma length 1.86–2.04 mm, width 1.30–1.44 mm, opisthosoma length 2.30–2.37 mm, width 1.48–1.59 mm. ROBERTS (1985) described the body length of European individuals as  $\circlearrowleft$  4–4.5 mm,  $\circlearrowleft$  3.5–4 mm. This is a relatively small species in the genus.

This species is the representative of the species-group including six Japanese species previously known, *C. diversa, C. rostrata, C. amurensis, C. basarukini, C. insulana* and *C. uenoi*. Of these, *C. trivialis* resembles *C. amurensis* and *C. basarukini* described from Amur area, Siberia, and Sakhalin, respectively, by MIKHAILOV (1990).

Distribution. Holarctic.

# Clubiona mandschurica SCHENKEL, 1953 [sensu PAIK (1990)] (Figs. 3-4)

Clubiona mandschurica Schenkel, 1953, p. 61 (holotype ♂ from "Kirin, Mandschurei," 2-VI-1928, type depository (?), not examined).——Zhu & Yu, 1982, p. 61.——Hu, 1984, p. 294.——Guo, 1985, p. 155.——PAIK, 1990, p. 105.

Clubiona sp. (b): Ono, 1986 c, p. 168.

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Figs. 3-4. Clubiona mandschurica (Akita Pref.).—3, Male palp, ventral view; 4, same, retrolateral view. (Scale: 0.1 mm.)

Specimens examined. 13, Nakaobonai, Tazawako-machi, Akita Pref., Japan, 21–VI–1975, K. Yamagishi leg. (NSMT–Ar 3168); 13, 1 juv. 3, Chûgu-jinja, Yoshinotani-mura, Ishikawa-gun, Ishikawa Pref., Japan, 3–VI–1985, H. Ono leg. (NSMT–Ar 3169).

Notes. Measurement based on the Japanese specimens:  $\circlearrowleft$  Body length 5.55–6.37 mm, prosoma length 2.44–3.04 mm, width 1.77–2.15 mm, opisthosoma length 3.11–3.41 mm, width 1.41–1.67 mm. PAIK (1990) described the body length of Korean individuals as  $\Leftrightarrow$  6.09–9.72 mm,  $\circlearrowleft$  5.06–6.35 mm; body length of the holotype: 6.3 mm (cephalothorax 2.3+abdomen 4.0) (SCHENKEL, 1953).

This species belongs to the species-group of *Clubiona obesa* (? subgroup of *C. sapporensis*).

Distribution. Japan (Honshu), Korea, China.

### 摘 要

フクログモ属の2種, *Clubiona trivialis* C. L. Koch, 1843 [キタカゼフクログモ (新称); 北海道羊蹄山] および *C. mandschurica* Schenkel, 1953, sensu Paik, 1990, [ニシカゼフクログモ (新称); 秋田県, 石川県] を日本から新たに記録した。前者はヨーロッパからシベリア, 北アメリカに広く分布し,後者は現在のところ中国,韓国,日本から知られる。

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